

REMARKS

Claims 1-3, 11, and 14 have been amended and Claims 1-3, 7-14, 18 and 19 remain pending in the present application. Support for the amendments is found in the specification and claims as filed. Accordingly, the amendments do not constitute the addition of new matter. Reconsideration of the application in view of the foregoing amendments and following comments is respectfully requested.

Claim Rejections - 35 U.S.C. § 112

The Office Action rejected claims 1-3 and 7-10 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In particular, claim 1 is not clearly understood because “weld flux” recited in claim 1 does not perform the connection between the fin structure and the substrate. Besides, the Examiner asserts that applicants’ “welding” is in reality “brazing.”

In the amended claims 1 and 11, the term “welding flux” is replaced with “solder”. In the amended claims 1-3, 11 and 14, term “welding part” is replaced with “bonding part”. Support for the amendments is found in the specification and claims as filed. Accordingly, the amendments do not constitute the addition of new matter. Therefore, Applicant respectfully submits that the rejections under 35 U.S.C. §112 should be withdrawn.

In addition, the applicant submits that “welding” is actually “soldering”. What is disclosed in the specification is self-evident that the term “welding” is of inadvertent use.

Applicant wishes to clarify that the foregoing amendments were made for the purpose of addressing a 112, second paragraph, rejection and NOT for the purpose of avoiding any prior art reference. Accordingly, no prosecution history estoppel arises from the amendments made herein.

Specifications

In order to conform to “welding”-related amendments in claims, the specification of present application has been amended to correct the inadvertent using of “welding”.

Support for the amendments is found in the specification and claims as filed. Accordingly, the amendments do not constitute the addition of new matter.

Claim Rejections - 35 U.S.C. § 102

The Office Action rejected claims 1-3, 7-14 and 18-19 under 35 U.S.C. §102(b) as being anticipated by Ito (US 5,558,155).

Of rejected claims, only claims 1 and 11 are independent.

As defined by the amended **claim 1**, a cooling fin structure is connected to a substrate with a solder and comprises at least one thermally conductive sheet. Each of the thermally conductive sheets is bent to form a heat radiation part and a bonding part. The bonding part **has a flat surface in contact with the substrate** and is formed with a **vacant region**. The solder is disposed between the substrate and the bonding part, and the vacant region exposes the squeezed solder underneath.

As defined by the amended **claim 11**, a fin assembly comprises a substrate and a plurality of cooling fins soldered thereon. Each of the cooling fins is bent towards one direction to form a heat radiation part and a bonding part. The bonding part **has a flat surface soldered on a surface of the substrate**. The bonding part is formed with a **vacant region** such that part area of the surface of the substrate, between adjacent two of the cooling fins, is not covered by the cooling fins.

Both claims 1 and 11 recite the features, “the bonding part **has a flat surface soldered on a surface of the substrate** and is formed with a **vacant region**.”

However, **Ito** fails to disclose a cooling fin structure or a fin assembly, as recited by the amended claims 1 and 11. In particular, Ito discloses a fin (18 or 19) having a V-shaped concave section (18 g or 19 g) on a surface in contact with a substrate (12). See Figs. 6, 8 and 9 of Ito. That is, the fin (18 or 19) fails to disclose a flat surface in contact with a substrate (12). Therefore, the features “the bonding part **has a flat surface soldered on a surface of the substrate** and is formed with a **vacant region**” would not be anticipated by Ito.

Serrate edge should look like teeth of saw. The Examiner asserts that Figs. 6 and 9 of Ito discloses notches 18g and 19g, respectively, which is read as defining a “serrate edge”. By definition (i.e. Encarta Dictionary), a serrate edge should look like teeth (plural) of saw. That is, **a serrate edge should have a series of continuous notches thereof**. Ito merely discloses two discontinuous notches, which do not adequately anticipate a serrate edge as recited in the amended claim 3.

Since **Ito** fails to teach or suggest all features, as expressly recited by the amended claims 1 and 11, the novel features of claims 1 and 11 produce new and unexpected results and hence are unobvious and patentable over these references.

In addition, claims 2-3 and 7-10 depend from claim 1 and claims 12-14 and 18-19 depend from claim 11. These claims add further limitations thereto. Thus, claims 2-3, 7-10, 12-14 and 18-19 of the present application are also novel and unobvious over the prior art of record. Accordingly, Applicant respectfully submits that the rejections under 35 U.S.C. §102(b) should be withdrawn.


Reconsideration and withdrawal of this rejection is respectfully requested.

Conclusions

For all of the above reasons, applicants submit that the specification and claims are now in proper form, and that the claims define patentably over prior arts. Therefore applicants respectfully request issuance for this case at the Office Action's earliest convenience.

If the Examiner has any questions concerning the present amendment, the Examiner is kindly requested to contact the undersigned at (408) 749-6903. If any other fees are due in connection with filing this amendment, the Commissioner is also authorized to charge Deposit Account No. 50-0805 (Order No. JLINP181/TLC). A duplicate copy of the transmittal is enclosed for this purpose.

Respectfully submitted,
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